

U.S. Patent

Apr. 4, 1989

Sheet 1 of 32

4,818,816

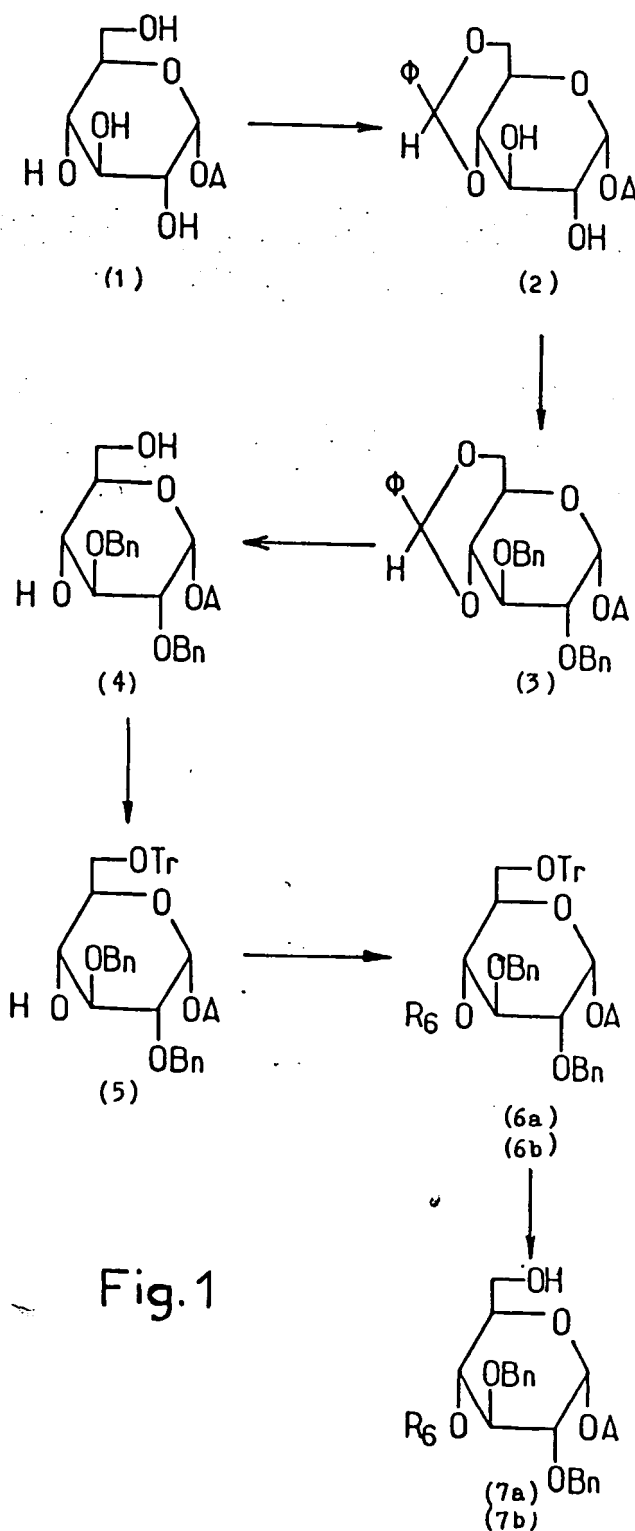


Fig. 1

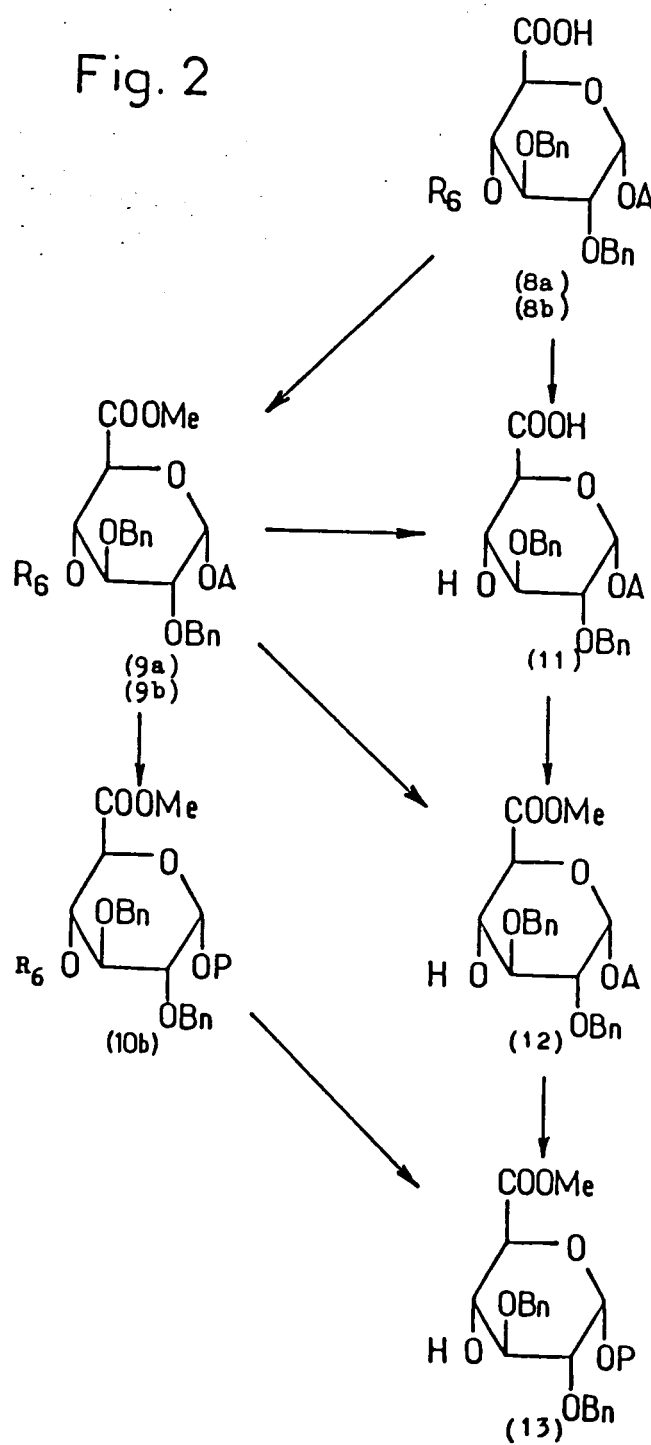
U.S. Patent

Apr. 4, 1989

Sheet 2 of 32

4,818,816

Fig. 2



U.S. Patent

Apr. 4, 1989

Sheet 3 of 32

4,818,816

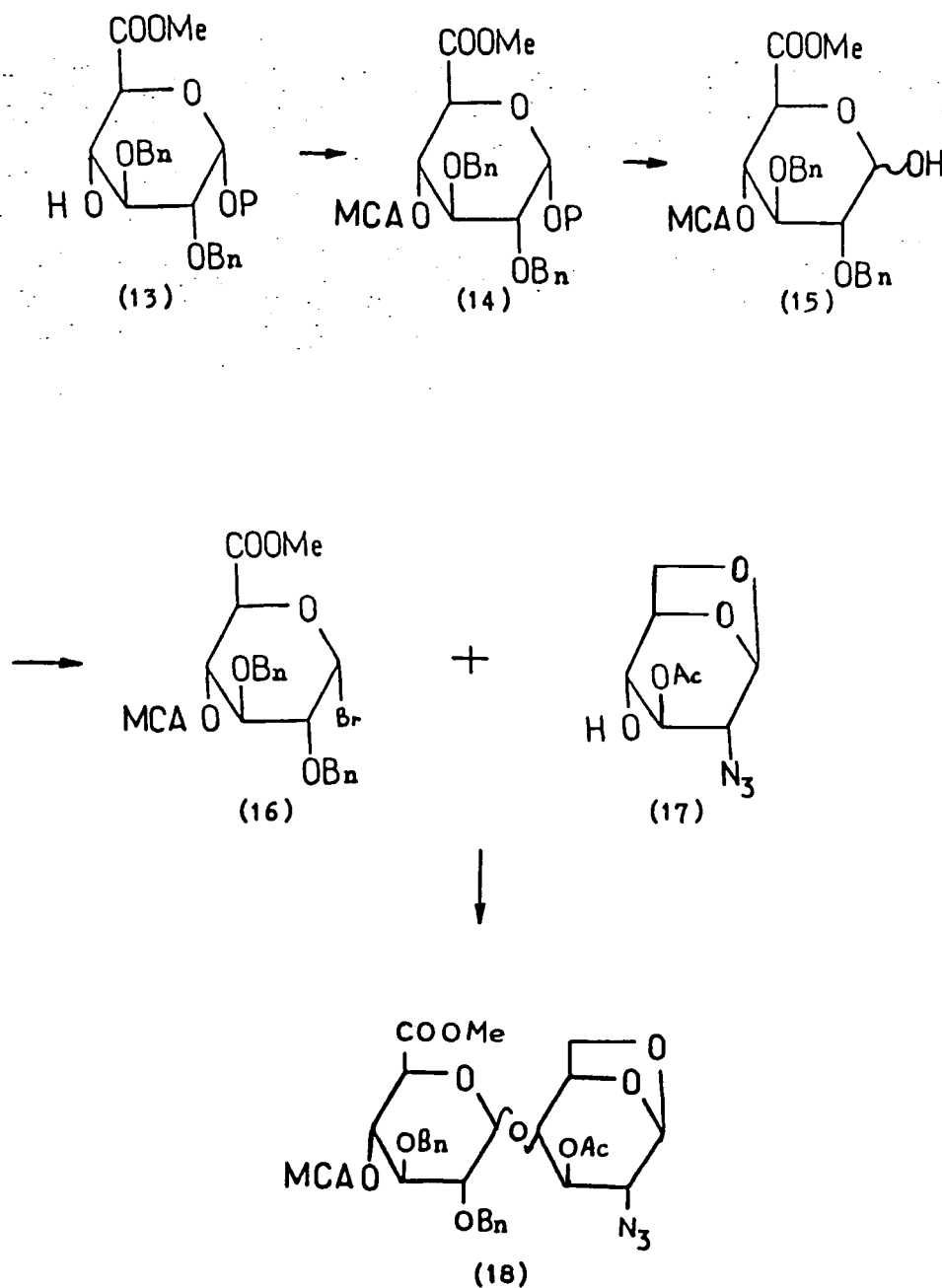


Fig.3

Fig.4

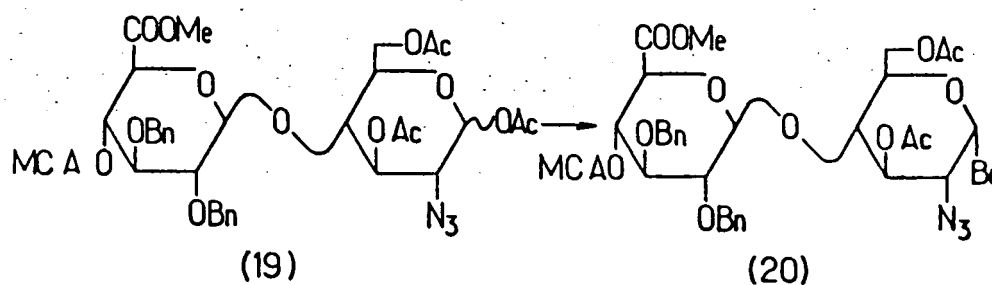
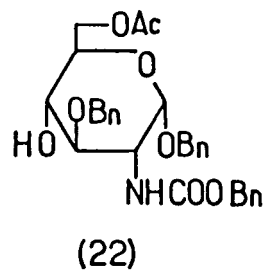
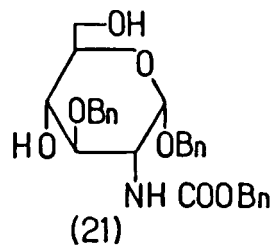


Fig.5



U.S. Patent Apr. 4, 1989

Sheet 5 of 32

4,818,816

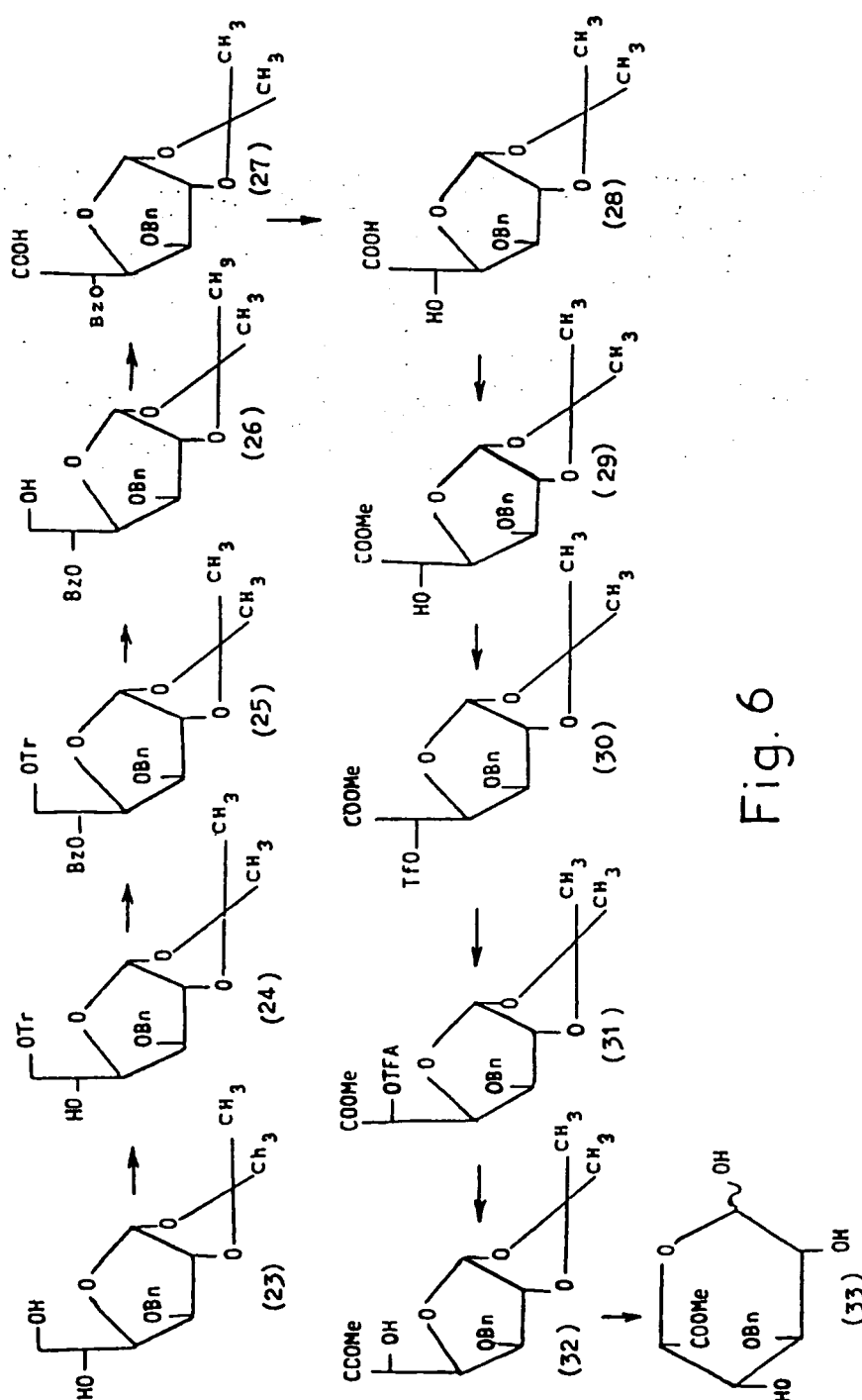


Fig. 6

U.S. Patent

Apr. 4, 1989

Sheet 6 of 32

4,818,816

Fig.7

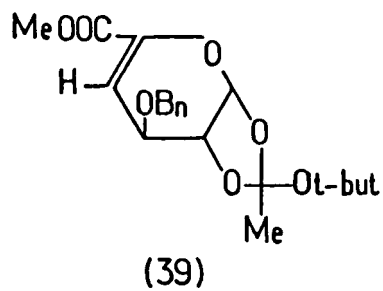
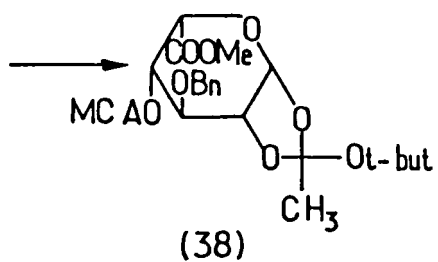
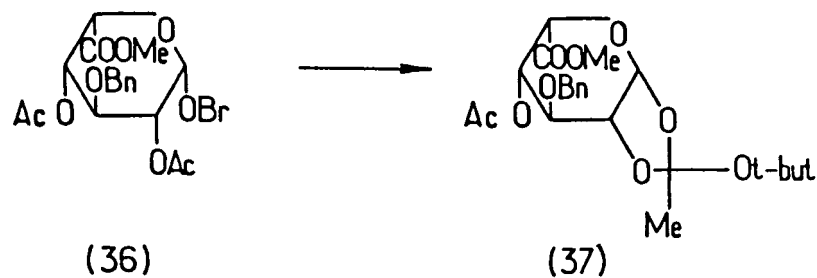
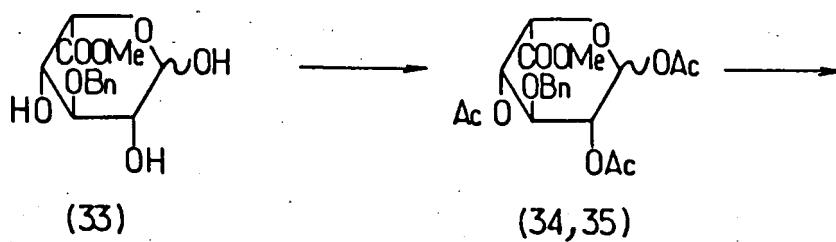
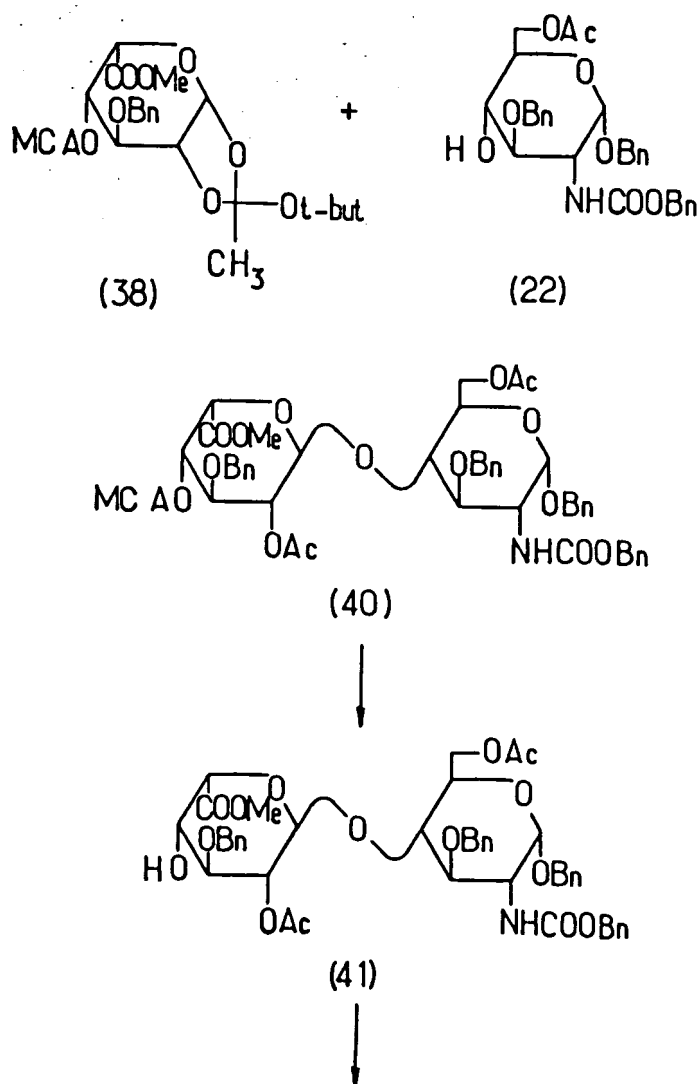


Fig.8

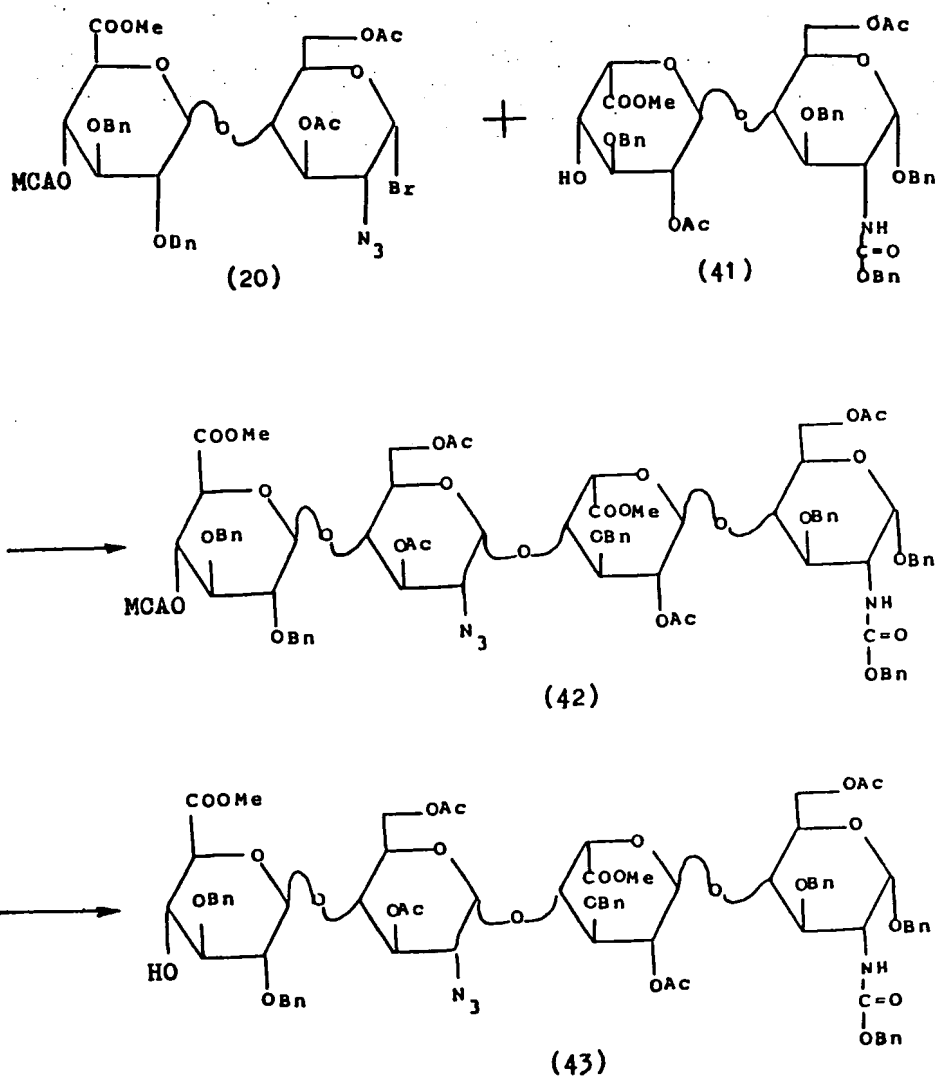


U.S. Patent Apr. 4, 1989

Sheet 8 of 32

4,818,816

Fig. 9





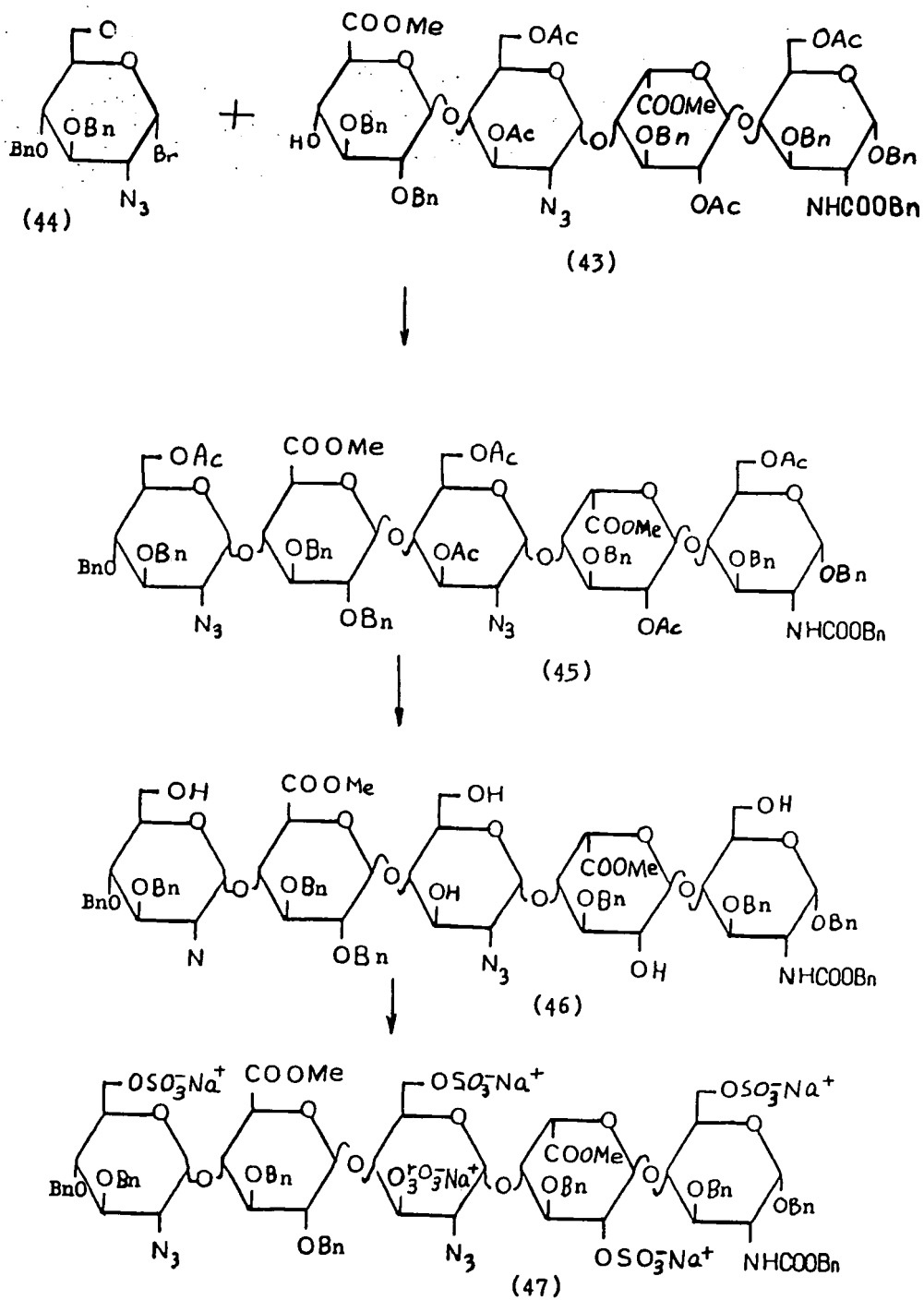
U.S. Patent

Apr. 4, 1989

Sheet 9 of 32

4,818,816

Fig. 10



U.S. Patent

Apr. 4, 1989

Sheet 10 of 32

4,818,816

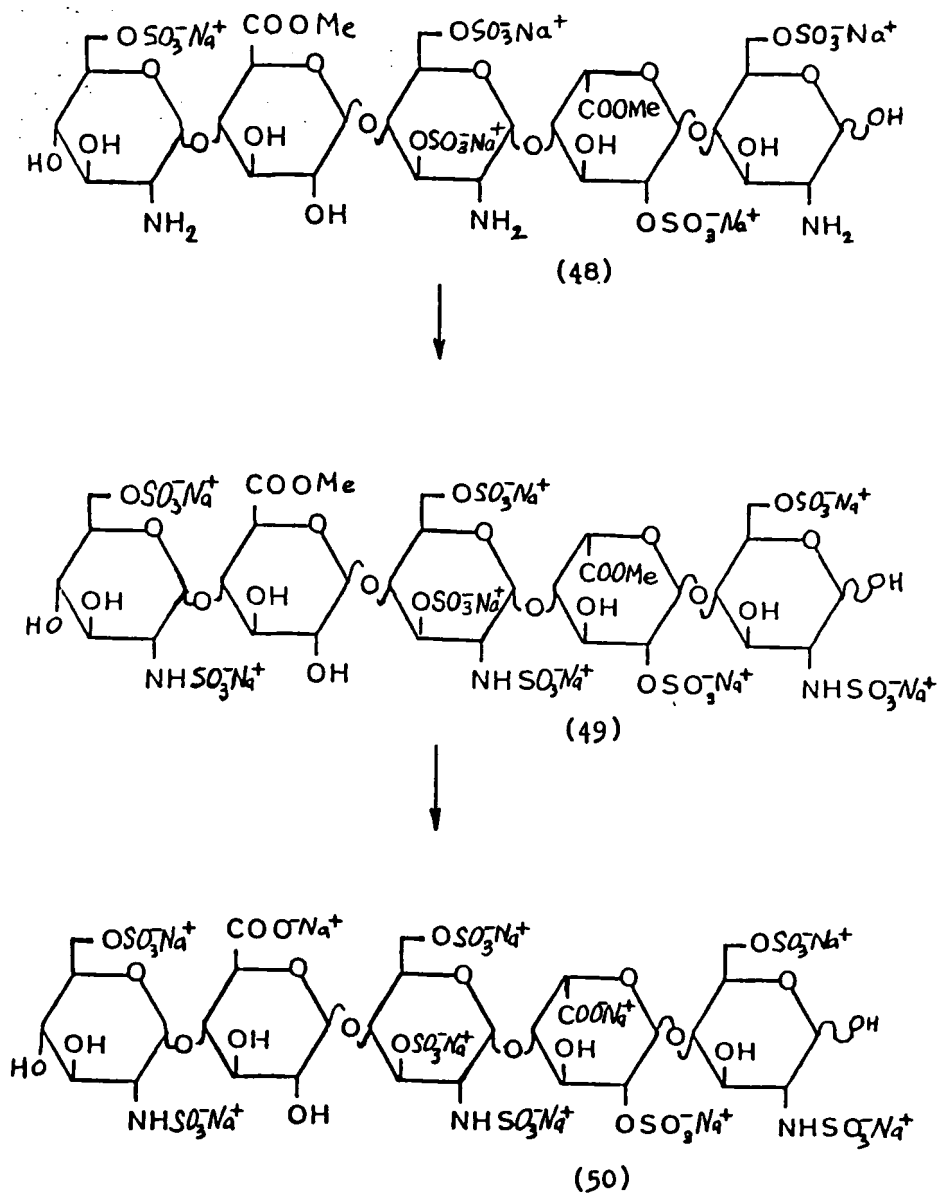


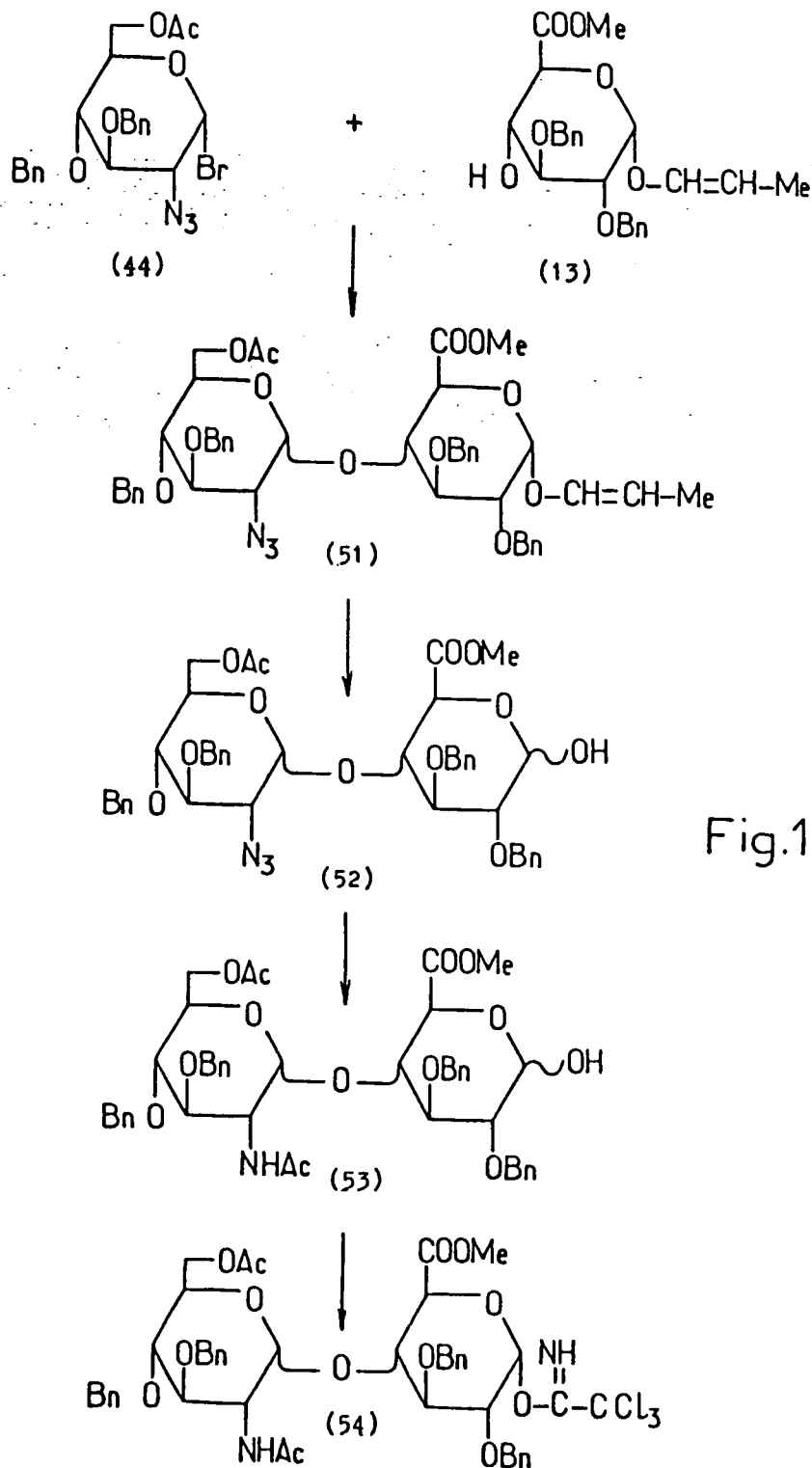
Fig.11

U.S. Patent

Apr. 4, 1989

Sheet 11 of 32

4,818,816



U.S. Patent

Apr. 4, 1989

Sheet 12 of 32

4,818,816

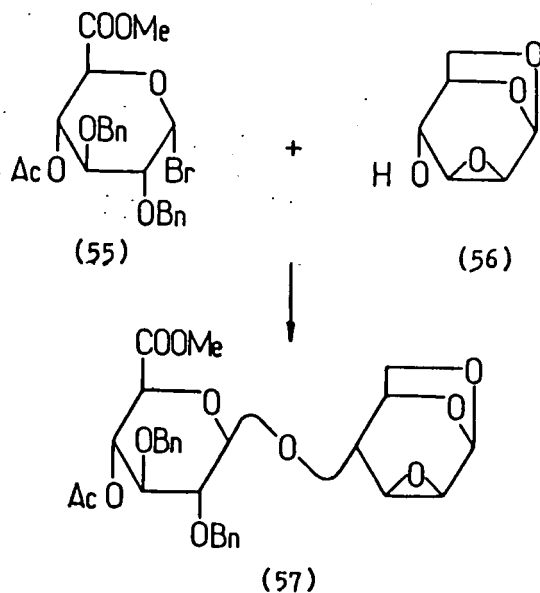
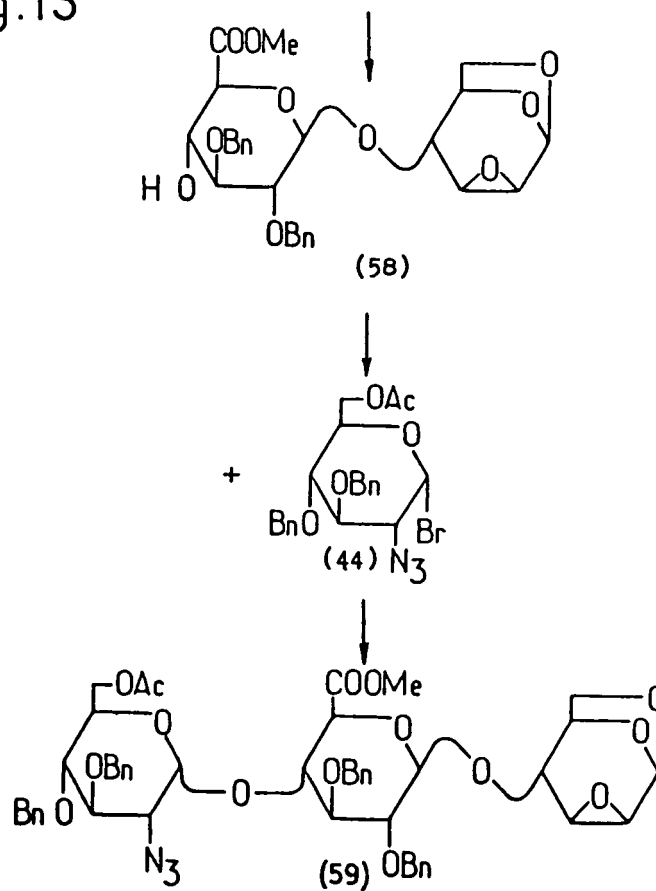


Fig.13



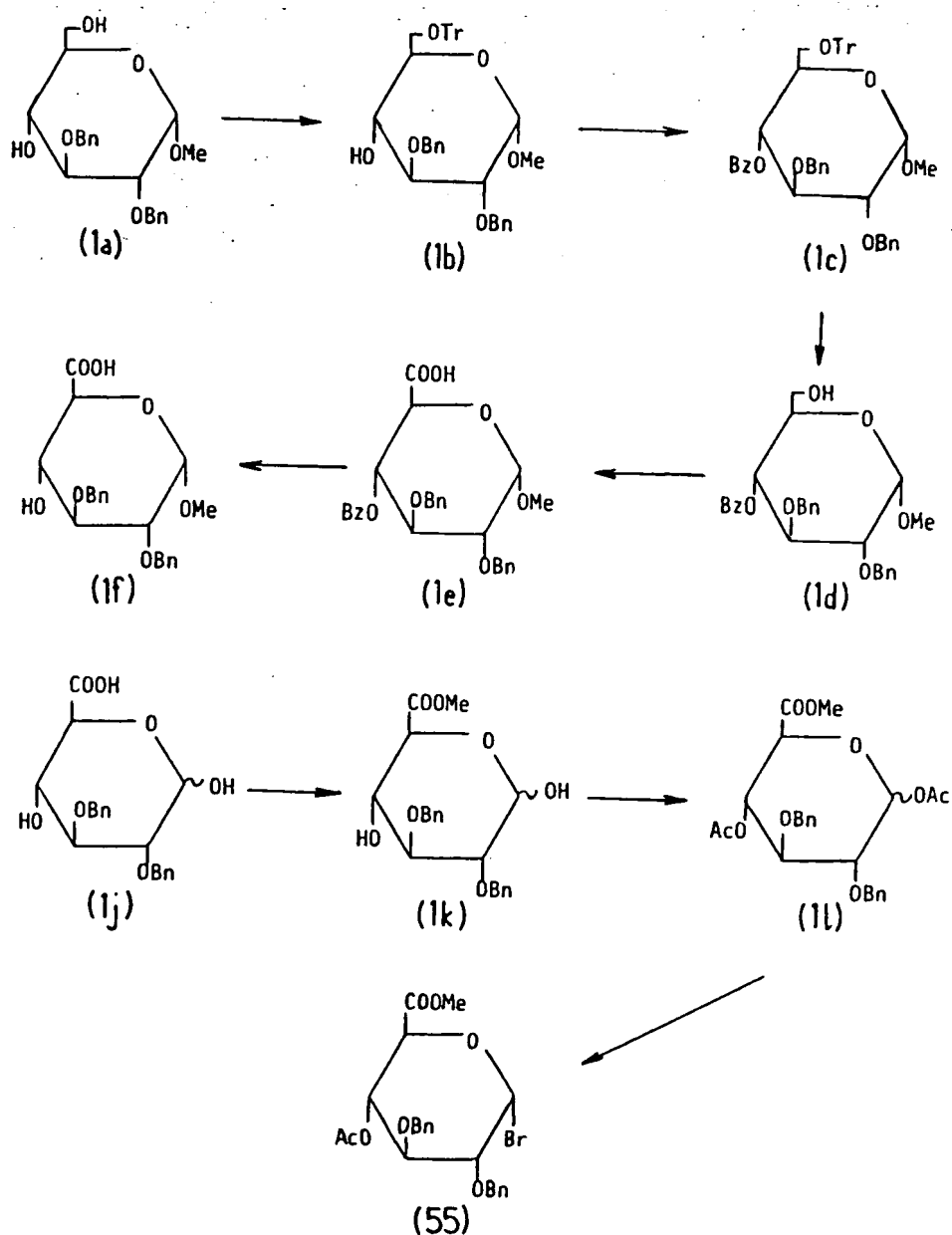
U.S. Patent

Apr. 4, 1989

Sheet 13 of 32

4,818,816

Fig. 13a



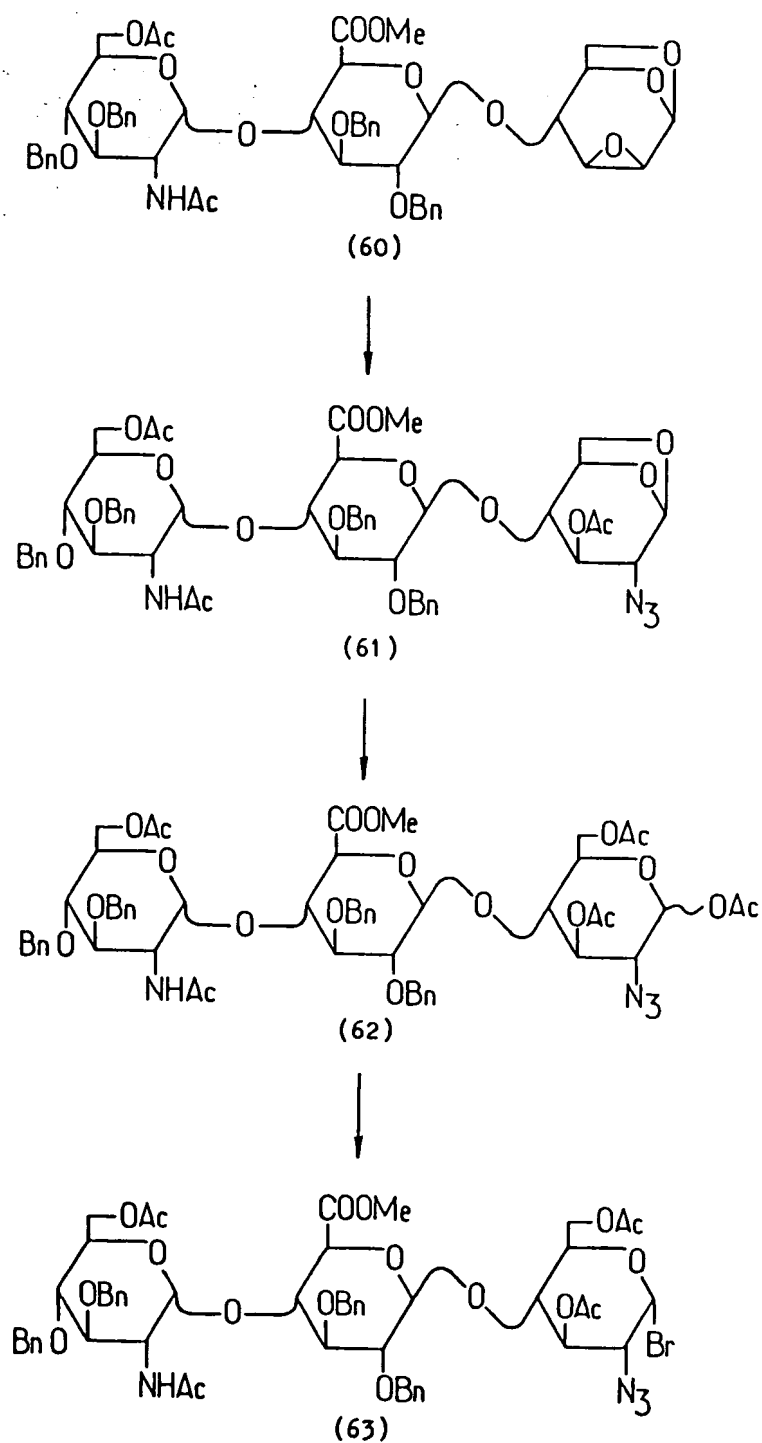


Fig.14

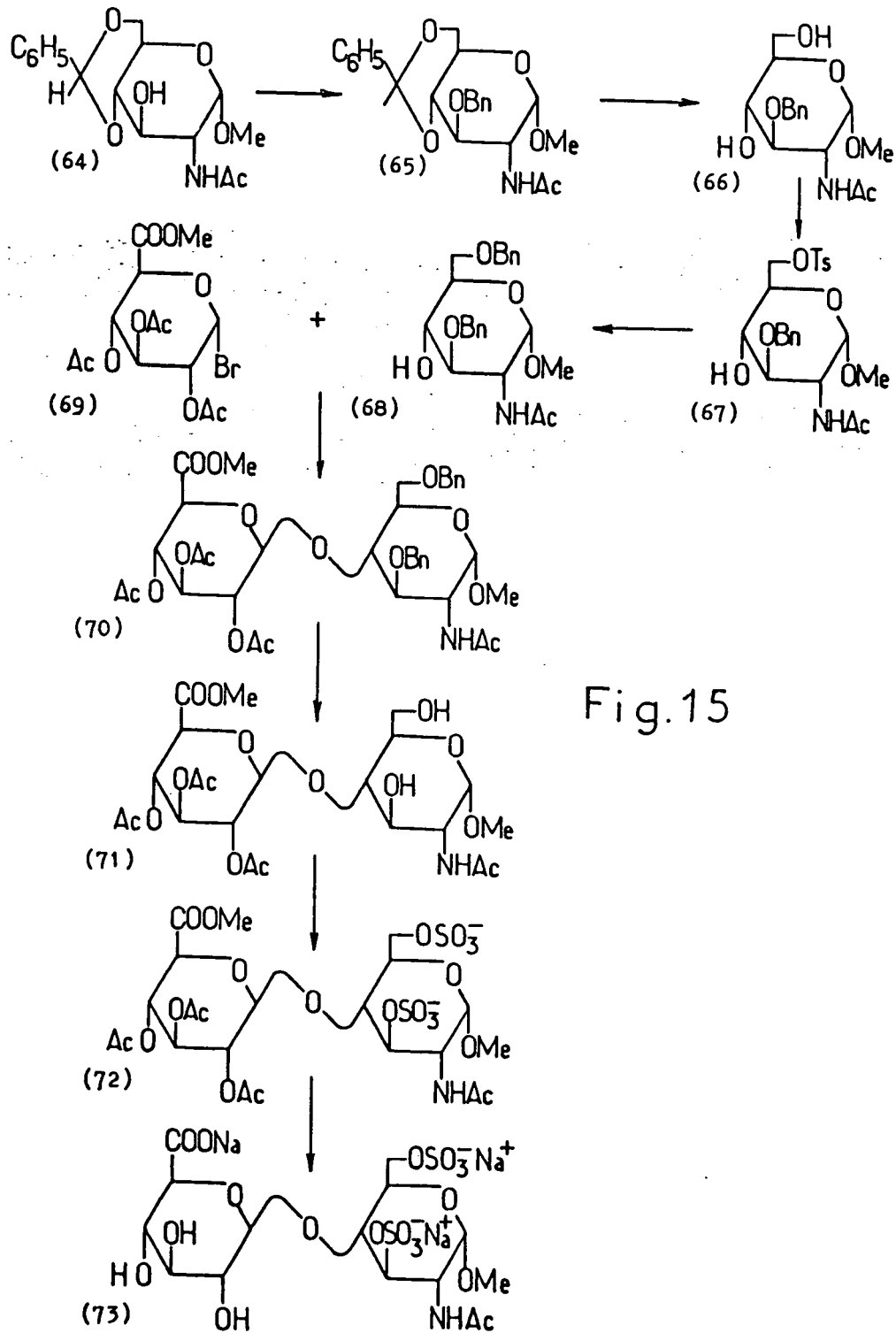


Fig.15

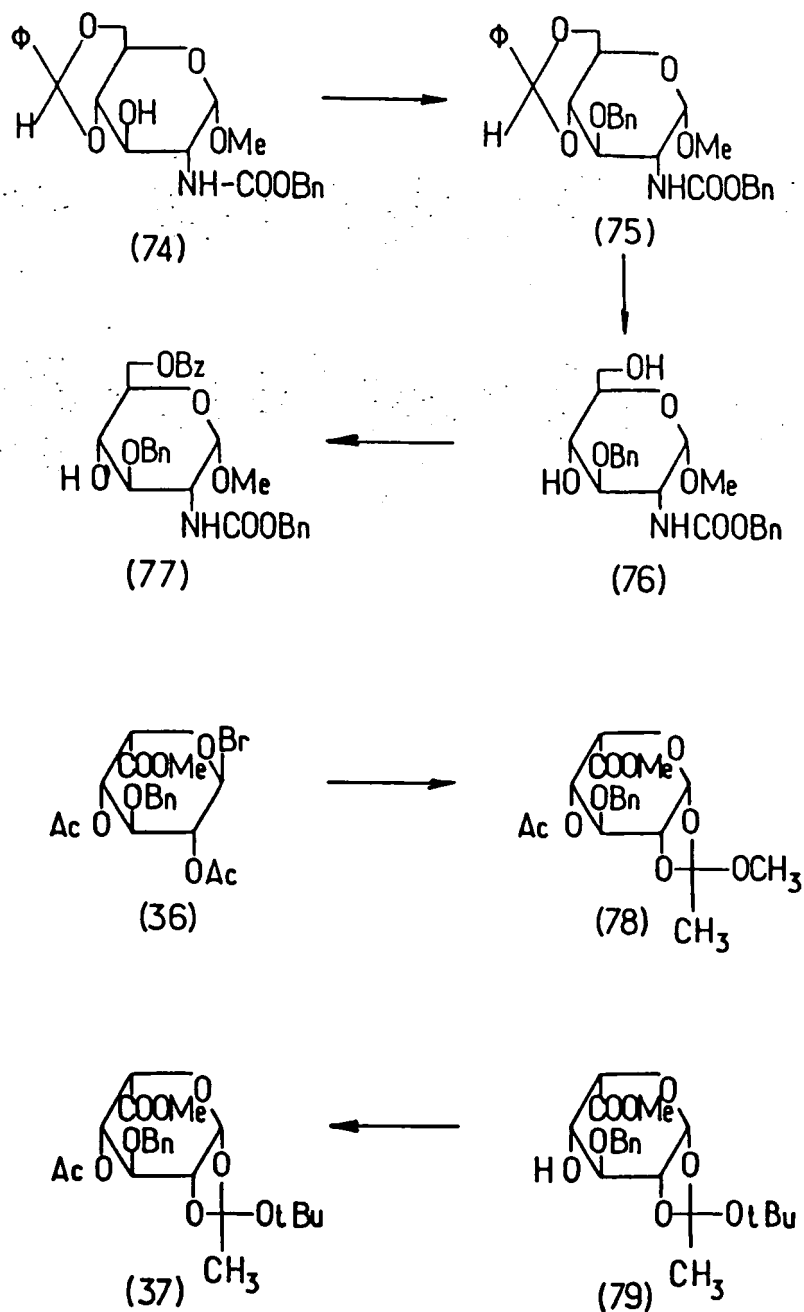
U.S. Patent

Apr. 4, 1989

Sheet 16 of 32

4,818,816

Fig.16





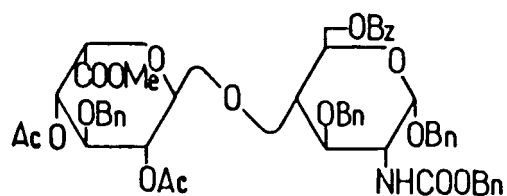
U.S. Patent

Apr. 4, 1989

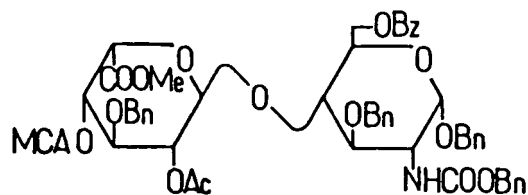
Sheet 17 of 32

4,818,816

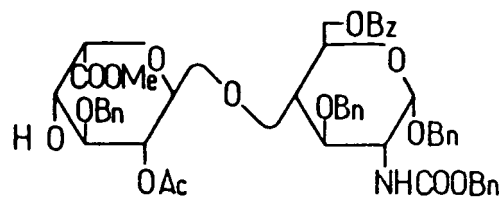
Fig.17



(81)



(82)



(83)

U.S. Patent

Apr. 4, 1989

Sheet 18 of 32

4,818,816

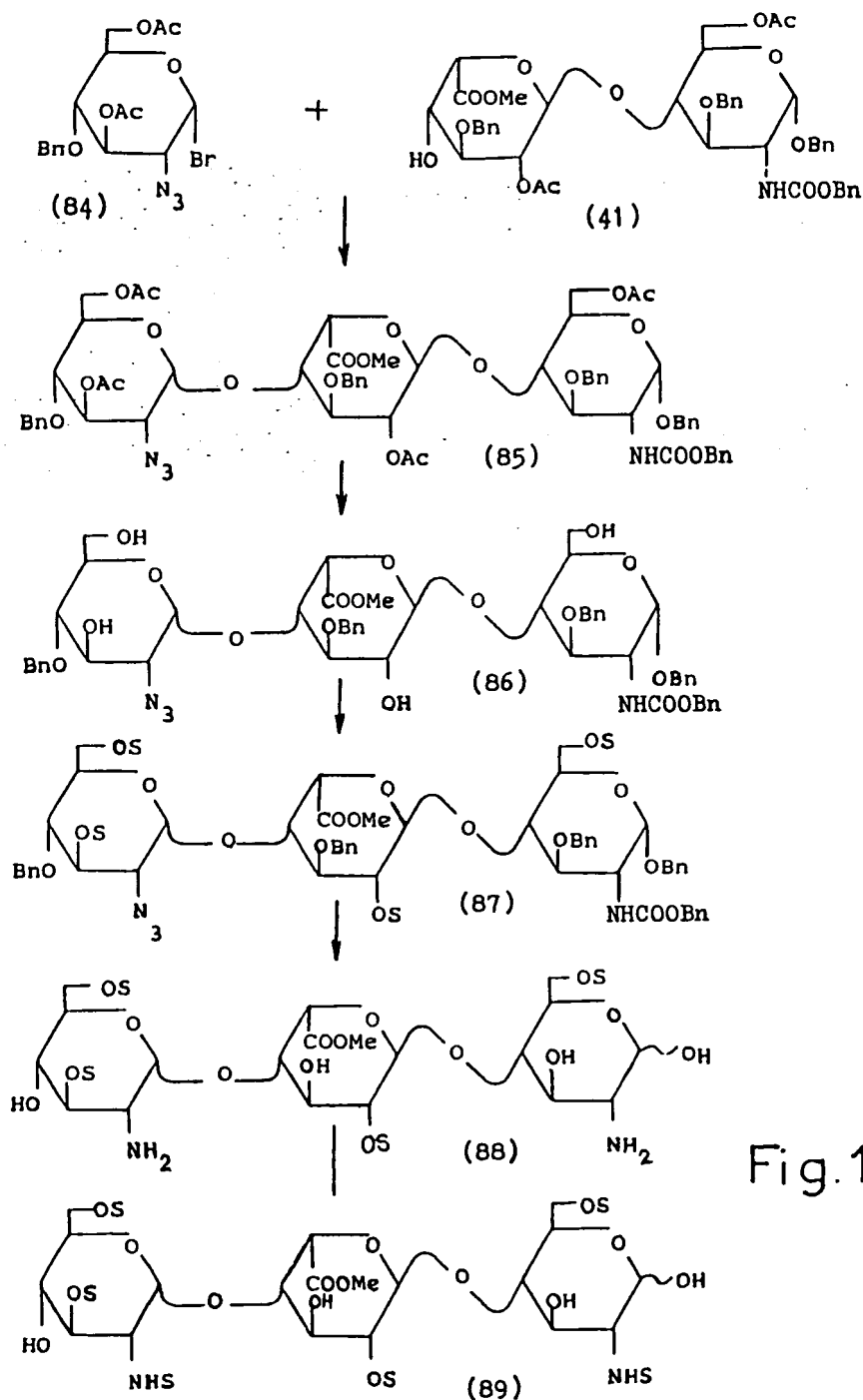


Fig.18

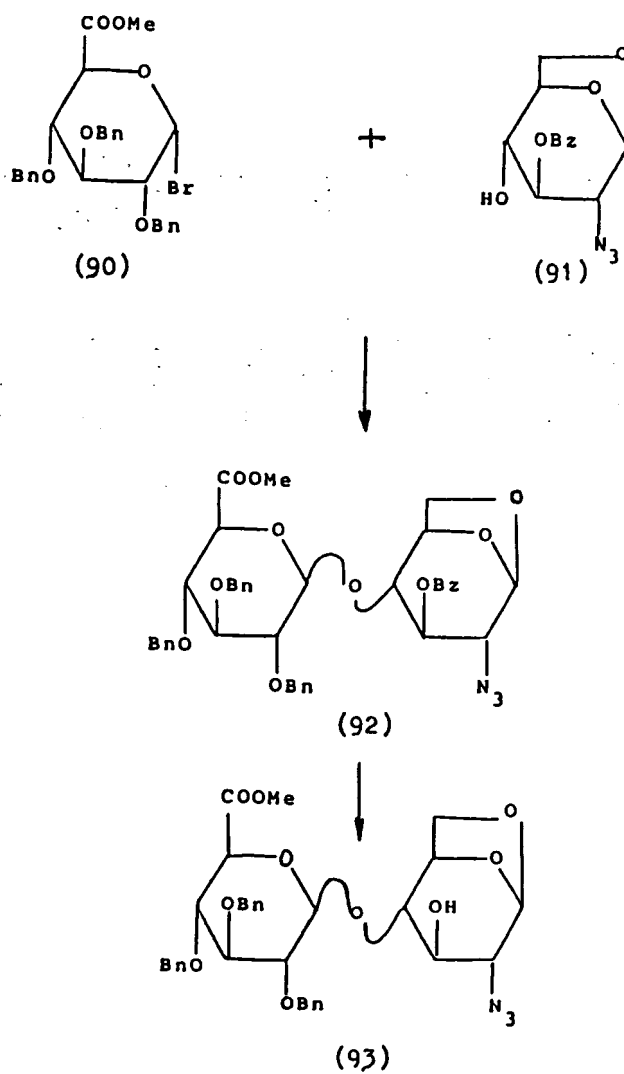


Fig. 19

U.S. Patent

Apr. 4, 1989

Sheet 20 of 32

4,818,816

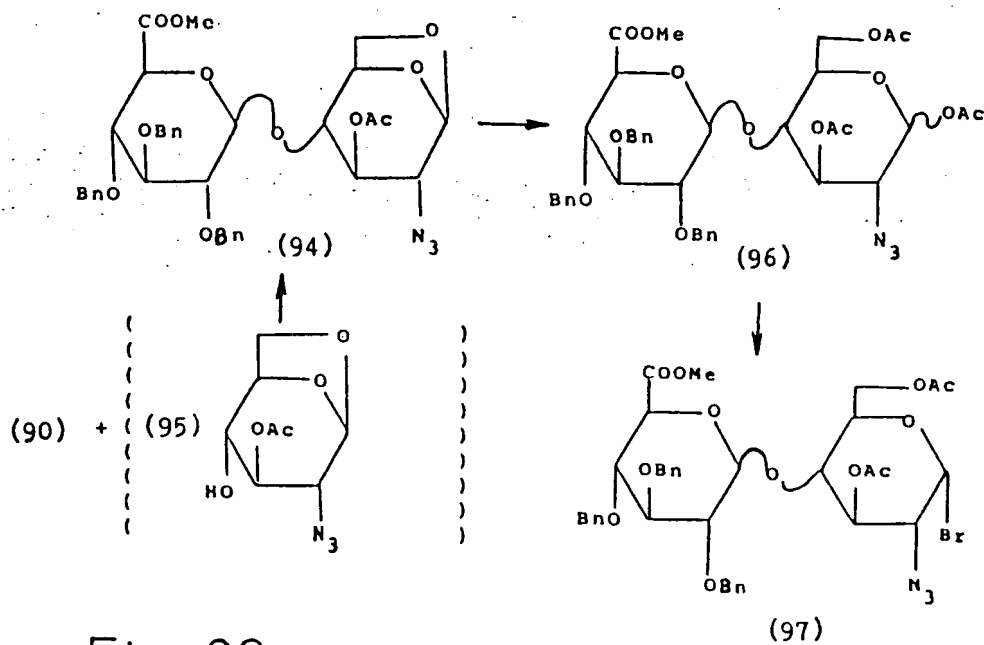
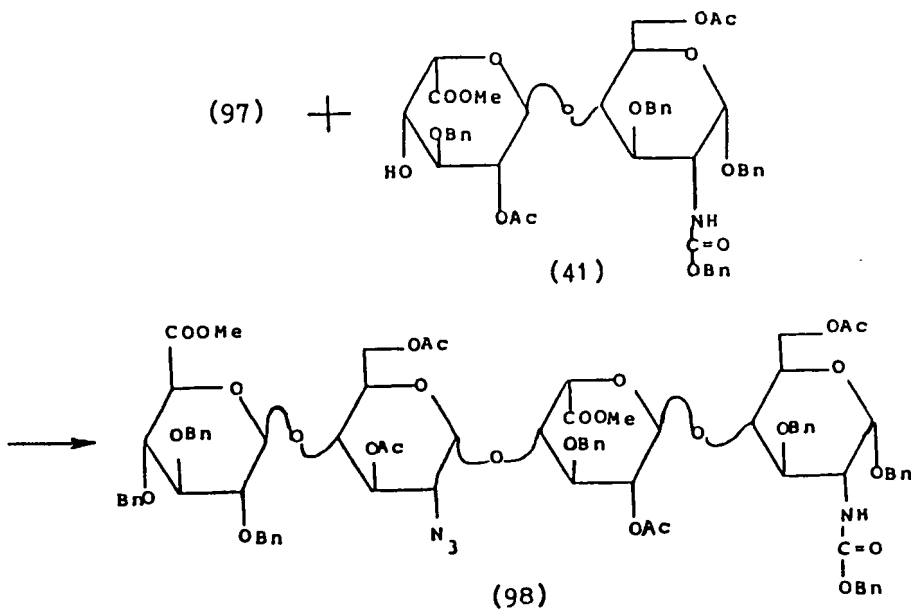


Fig. 20



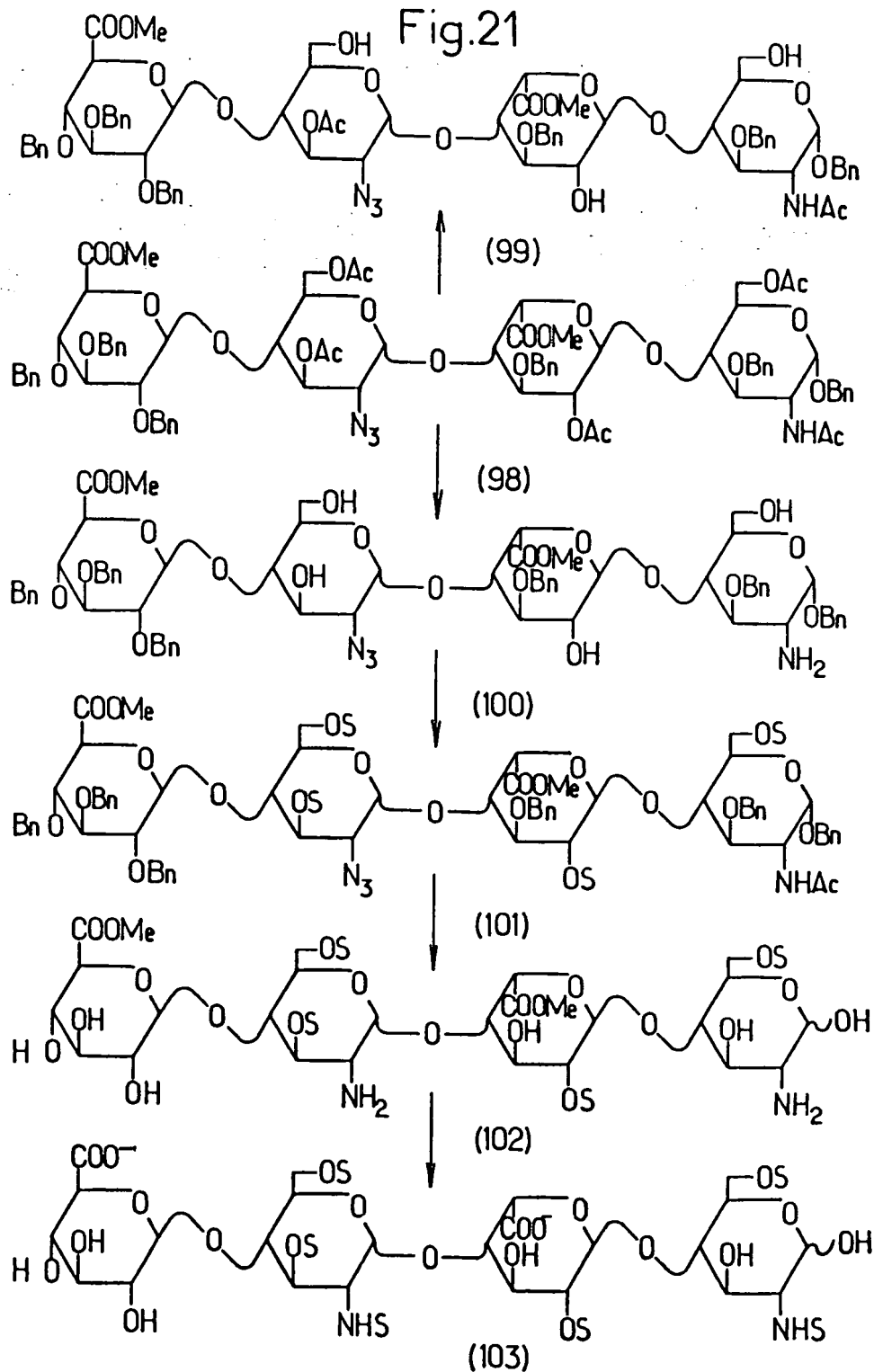
U.S. Patent

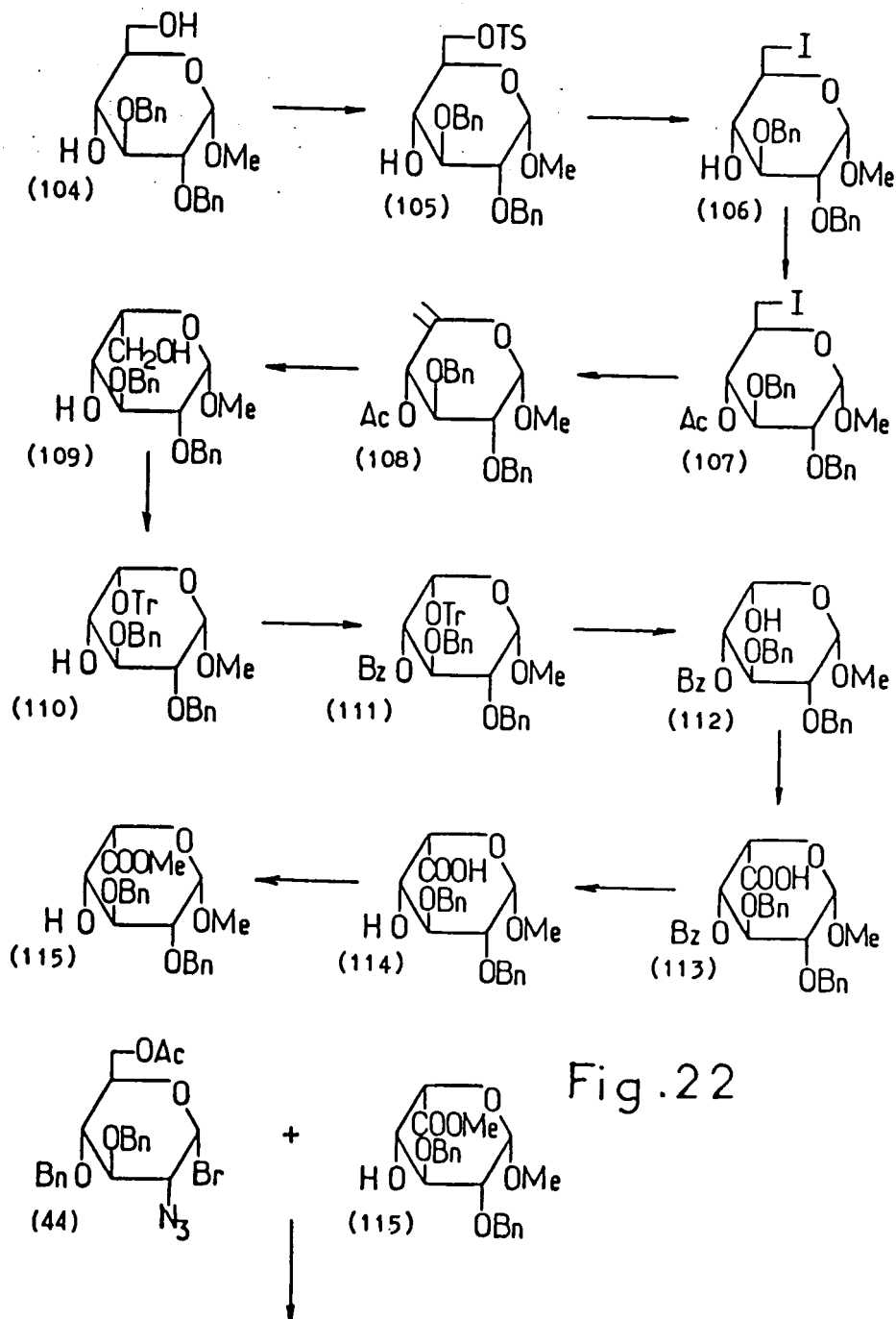
Apr. 4, 1989

Sheet 21 of 32

4,818,816

Fig. 21





U.S. Patent

Apr. 4, 1989

Sheet 23 of 32

4,818,816

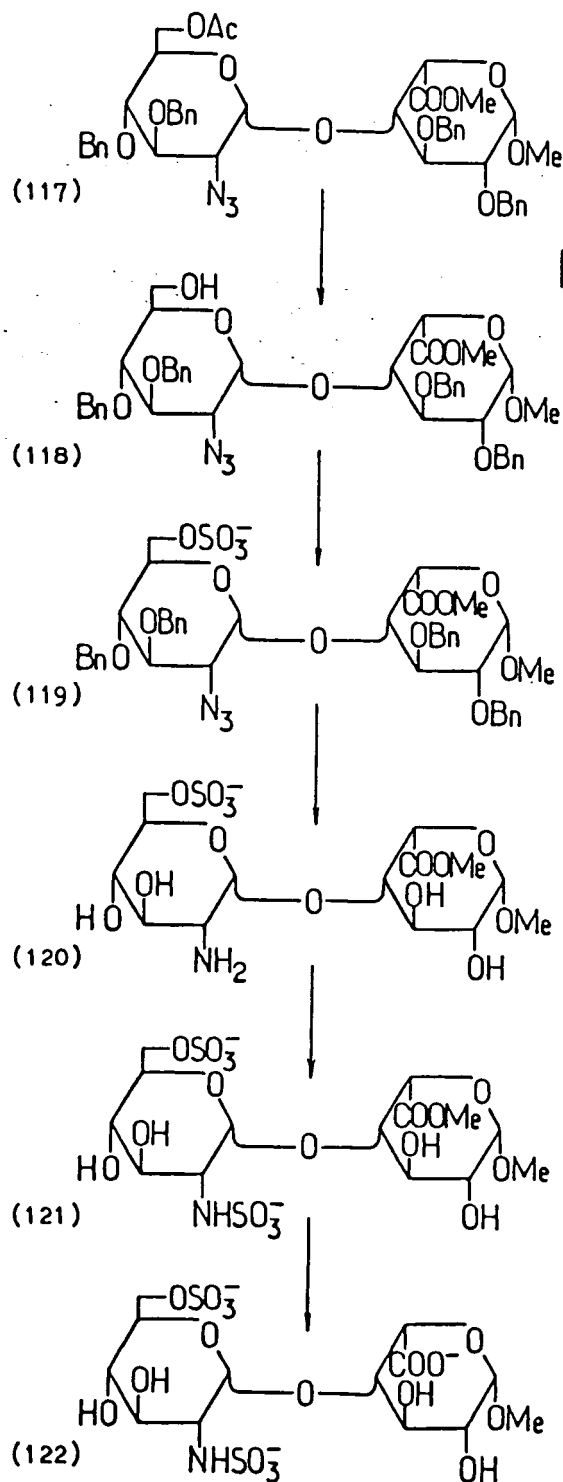


Fig. 23

U.S. Patent

Apr. 4, 1989

Sheet 24 of 32

4,818,816

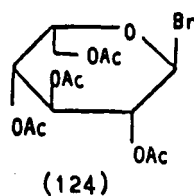
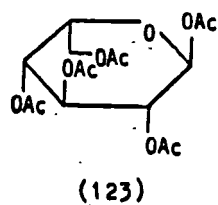
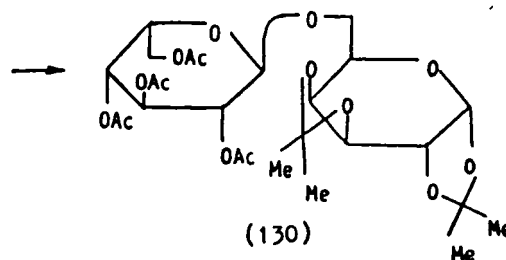
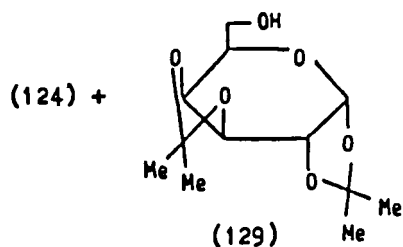
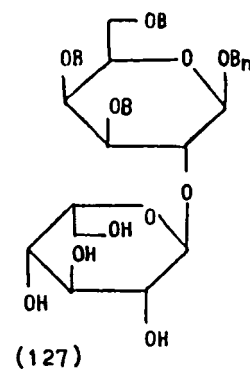
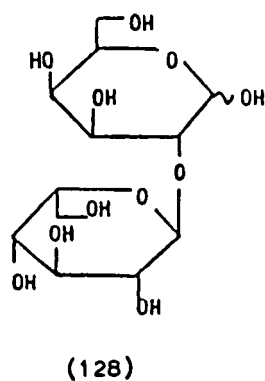
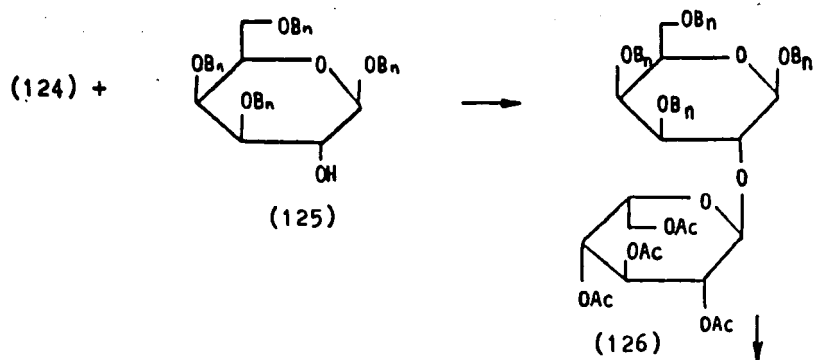


Fig. 24





U.S. Patent

Apr. 4, 1989

Sheet 25 of 32

4,818,816

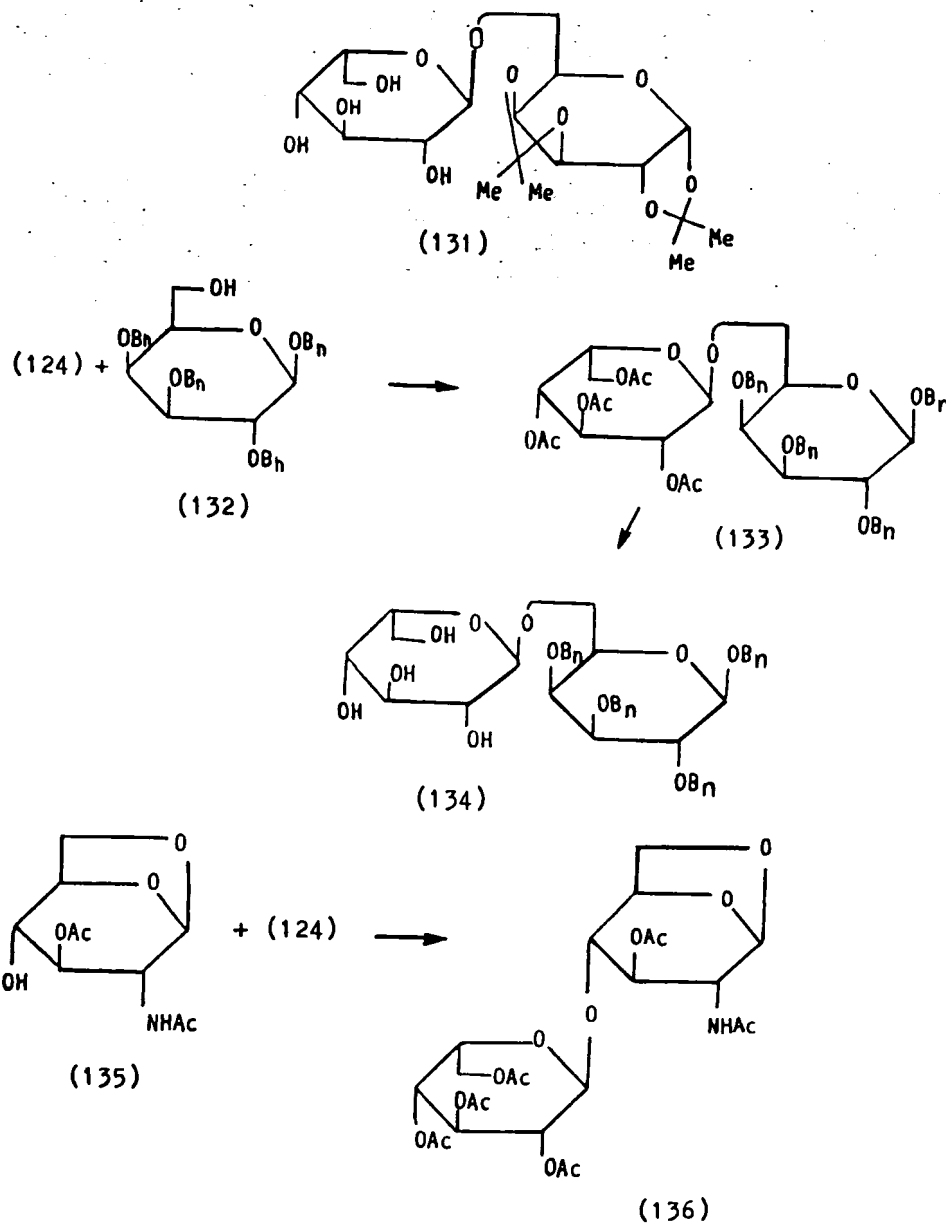


Fig. 25

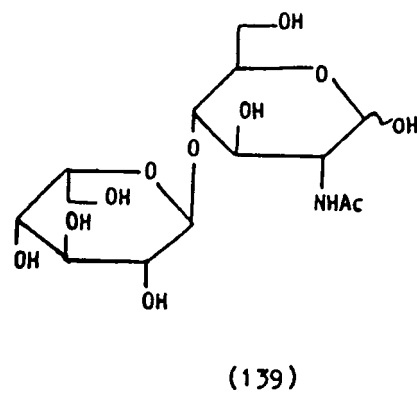
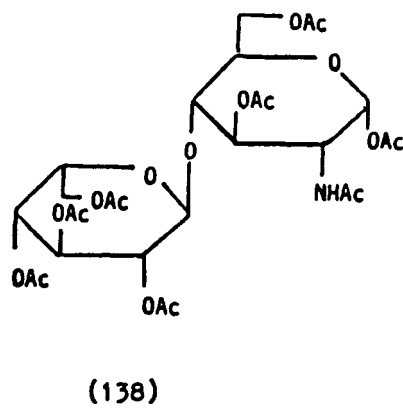
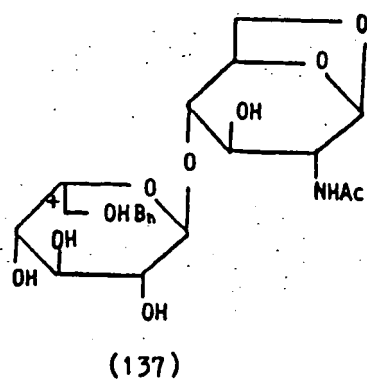


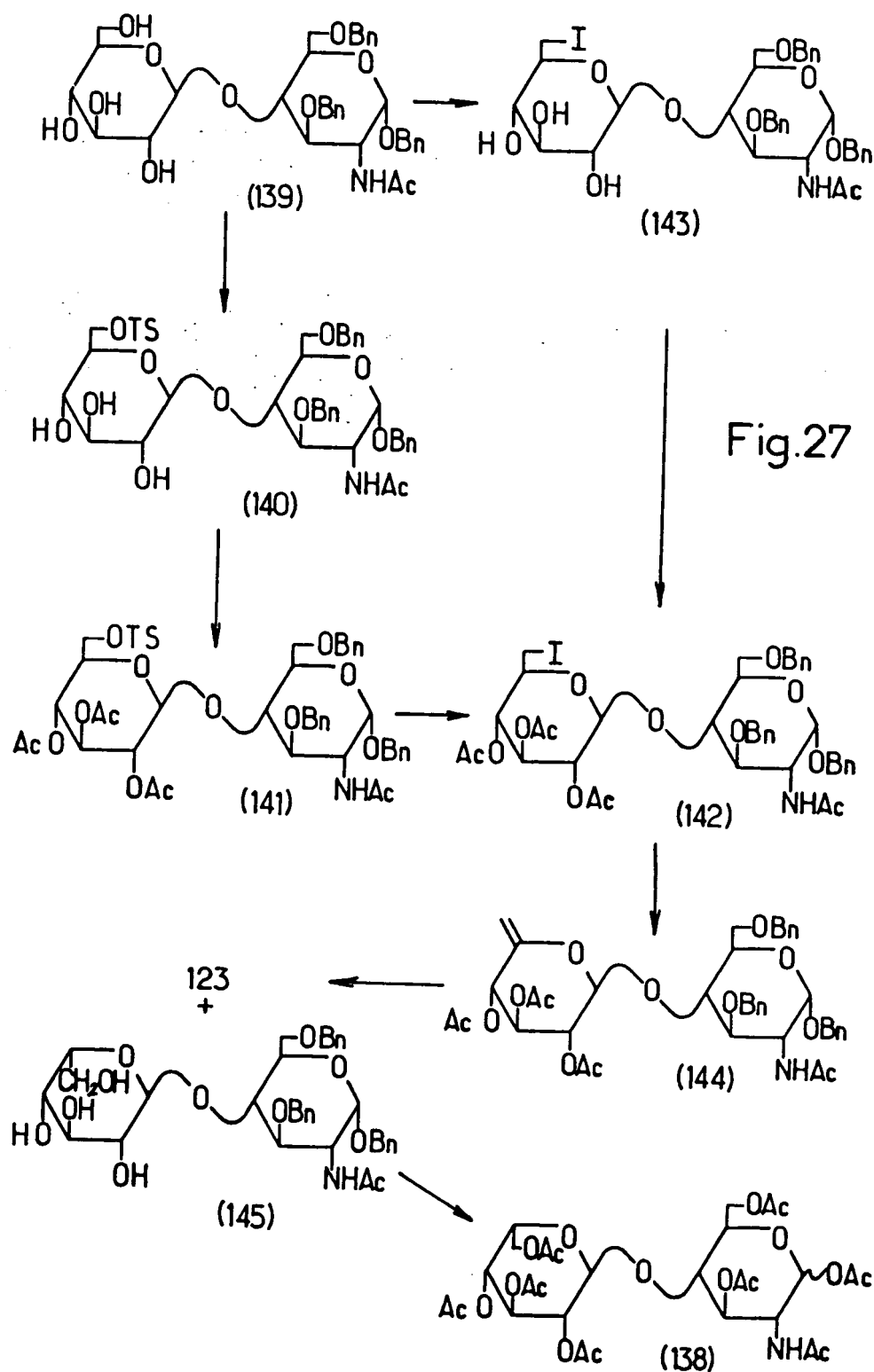
Fig. 26

U.S. Patent

Apr. 4, 1989

Sheet 27 of 32

4,818,816



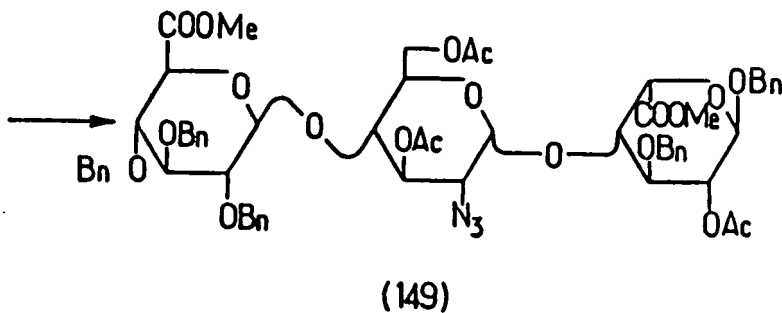
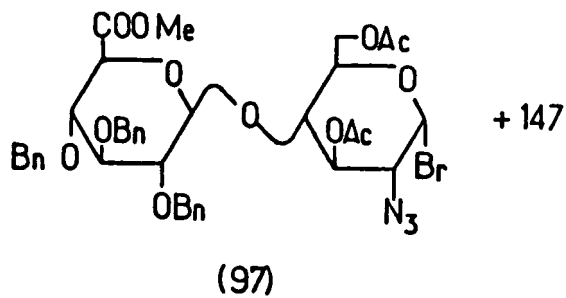
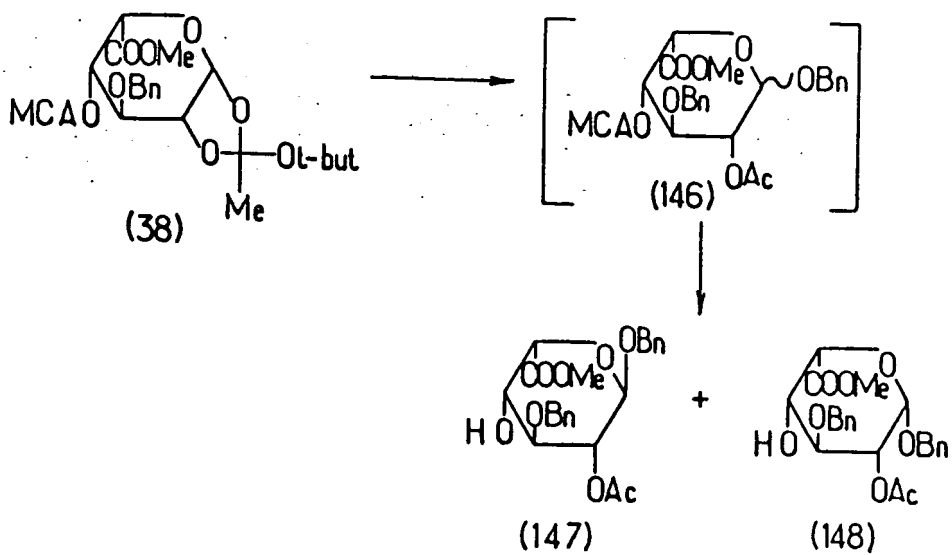
U.S. Patent

Apr. 4, 1989

Sheet 28 of 32

4,818,816

Fig.28



U.S. Patent

Apr. 4, 1989

Sheet 29 of 32

4,818,816

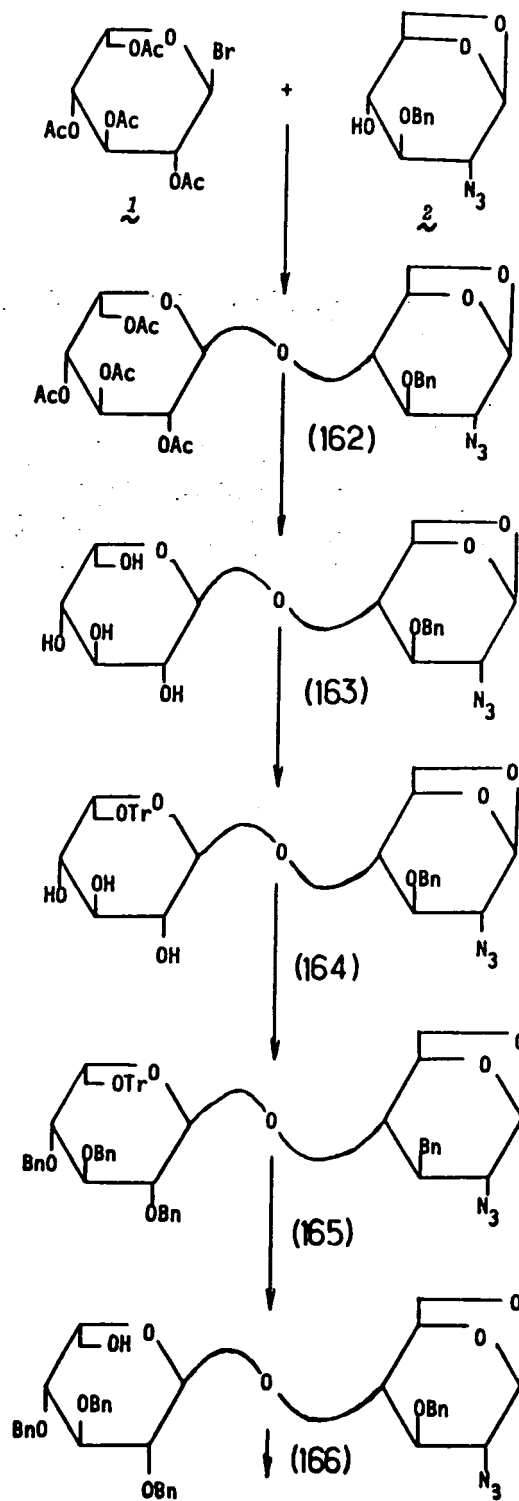


Fig. 29

U.S. Patent

Apr. 4, 1989

Sheet 30 of 32

4,818,816

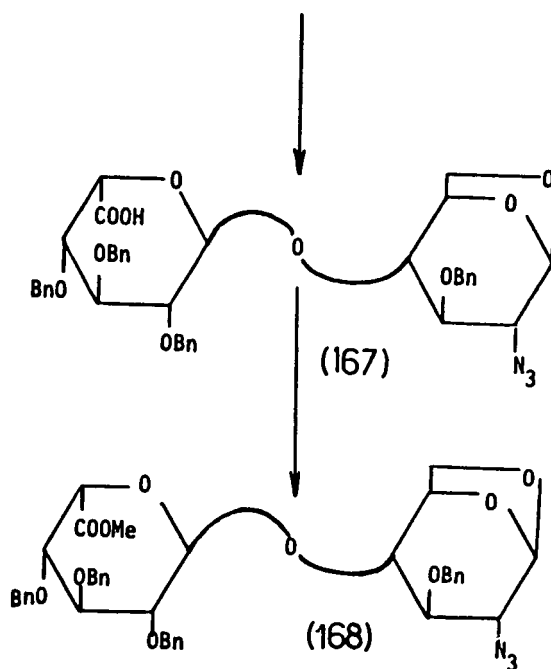


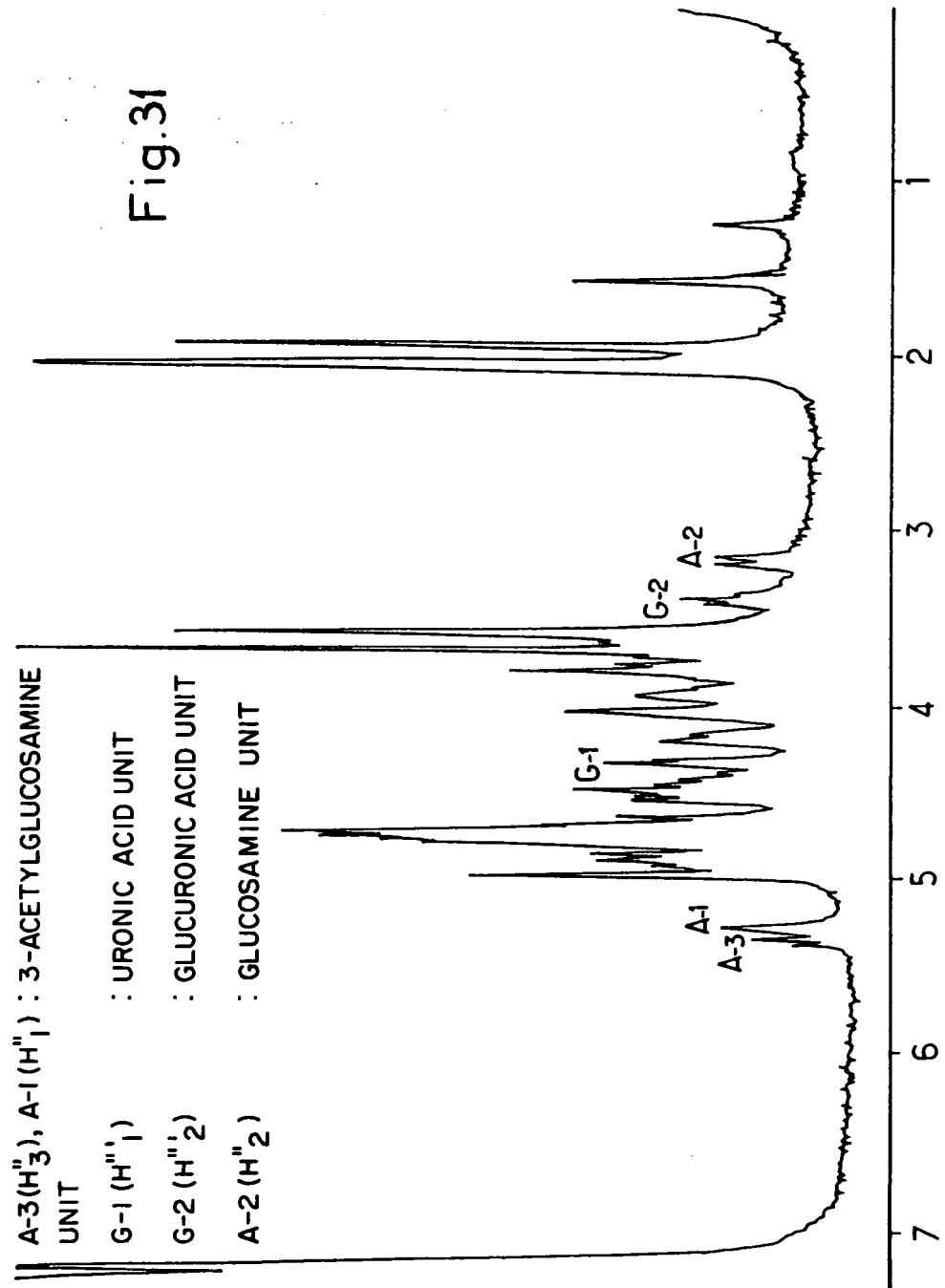
Fig. 30

U.S. Patent

Apr. 4, 1989

Sheet 31 of 32

4,818,816



U.S. Patent

Apr. 4, 1989

Sheet 32 of 32

4,818,816

Fig.32

